

2016 EDITION

SIGNIFICANT CHANGES TO THE
**CALIFORNIA
FIRE CODE**



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Important Changes to the 2016 CFC & SJMC Modifications

Presented by:

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Important Changes to the 2016 CFC & SJMC Modifications		
Section(s) and Issue(s)	Type of Change	Comment
SJMC – CFC 105.6.49 “Additional permits”	New Provision	Annual Permits required for ERRC; FBARS; & R-2 or R-2.1.
SJMC- CFC Chapter 2 “DEFENITIONS”	Revisions - Correlation	Definitions Related to Storage, Handling And Use of Regulated Materials. Addition of language modified to reflect language adopted by Santa Clara County Fire Prevention Officers.
CFC 901.8.2 “Removal of existing occupant-use hose lines”	New Provision	The fire code official is authorized to permit the removal of existing occupant-use hose lines where all of the following conditions exist: 3 conditions.
CFC 903.2.1.6 “Assembly Occupancies on Roof”	New Provision	Code now addresses how to deal with assembly occupancies on the roof of a building. When the occupant load > 100 for Group A-2 (i.e., restaurant), or > 300 for other Group A (i.e., meeting rooms, swimming pools) all floors to, and including, level of exit discharge are required to be sprinklered per NFPA 13 or NFPA 13R, as applicable. Since all new Group R occupancies are already required to be sprinklered, this new requirement is a good clarification of the Code for such common assembly occupancies that are to be located on the roofs of new apartment projects. Note that there is an exception to this sprinkler requirement for open parking garages of Construction Type I or Type II.
SJMC 903.2.8.5 “Balconies and decks”	Revision	Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units and sleeping units, provided there is a roof or deck above.
CFC 903.2.11.3 “Automatic Sprinkler Systems – Where Required- Buildings 55’ or More in Height”	Revision	This revision clarified that the 55’ is measured from the lowest level of fire department vehicle access to the finished floor level of the highest floor with an occupant load of \geq 30. Exceptions are provided for open parking garages and F-2 occupancies.
CFC 903.3.1.1.2 Exception “NFPA 13 Exempt Bathroom Sprinklers”	New Provision	The 2015 IBC references the 2013 NFPA 13. In the 2013 NFPA 13 Section 8.15.8.1 the small bathroom (\leq 55 sq. ft.) sprinkler exception was deleted for apartment dwelling units. Since the NFPA 13 Committee deleted this reasonable, long-standing, sprinkler exception out of its Code, the NFPA 101 Committee, as well as the ICC Membership, decided to place it back into the 2015 NFPA 101 and 2015 IBC. The NFPA 13 Committee is in the process of attempting to place the bathroom exception for dwelling units back into its 2015 edition of NFPA 13.



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CFC 903.3.1.2 “Installation Requirements NFPA 13R Sprinkler Systems”	Clarification	Section was revised to correlate with the scope of the 2013 NFPA 13R Standard. This should help prevent any misapplication of the sprinkler standards that apply to “...Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet in height above grade plane...”. The new second paragraph in this section clarifies that the number of stories of Group R occupancies above a podium or pedestal designed structure (see Section 510.4) is measured from the fire-rated horizontal separation that creates separate buildings. By default, this new second paragraph under the NFPA 13R requirements is also applicable to the number of stories of Group R occupancies above a podium structure when the entire structure is sprinklered per NFPA 13. For example, an R-2 occupancy of Construction Type IIIA, sprinklered per NFPA 13, can be five stories above the Type IA pedestal below as long as the overall building height from grade plane does not exceed 85 feet (IBC Table 504.3)
CFC 903.3.1.2.2 “Open-Ended Corridors”	New Provision – Correlation	This new section was added to the sprinkler requirements just to clarify that when applying the open-ended corridor (i.e., open breezeway) sprinkler requirements of Section 1027.6 Exception 3.1 to a building sprinklered in accordance with NFPA 13R, it is the intent of the IBC Code to also require the open-ended corridors and its associated exterior stairs to be sprinklered when using Exception 3 of Section 1027.6.
CFC 903.3.5 “Water Supplies”	Revision	New last sentence in section was added to clarify that the fire flow test for the design of the sprinkler system needs to be adjusted for seasonal and daily pressure fluctuations.
CFC 903.3.8 “Limited Area Sprinkler Systems”	Major Revisions	In existing, non-sprinklered apartment buildings, limited area sprinkler systems were mostly provided in basements where storage rooms, boiler rooms and similar spaces were located. Revisions reduced the number of sprinklers from 20 to six that can be used on a “limited area sprinkler system” in any single fire area. In addition, it now requires hydraulic calculations to be done to show that these sprinklers that are piped off the domestic water supply can control a fire.
CFC 907.2.9.3 “Alarm Systems - Group R-2 College and University Buildings”	Clarification	In the previous edition of the IBC, the alarm requirements of this section appeared to apply to buildings that are owned by a college or university. For the 2015 IBC it was clarified that this requirement was for Group R-2 occupancies that are “...operated by a college or university for student or staff housing...” Requires an automatic smoke detection system in the common corridors/spaces, laundry, mechanical equipment and storage rooms. It also requires the smoke alarms in the dwelling/sleeping units to be interconnected with the fire alarm system

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CFC 907.2.11.3 and 907.2.11.4 “Single and Multiple-Station Smoke Alarms Near Cooking Appliances”	New Provision - Correlation	These new sections were added to the alarm requirements to correlate with the requirements in NFPA 72 on the placement of smoke alarms. When ionization smoke alarms are to be installed they shall be placed a minimum of 20 feet from cooking devices, or a minimum of 10 feet if they have an alarm-silencing switch. If photoelectric smoke alarms are to be installed they shall be placed a minimum of six feet from cooking devices.
CFC 907.2.11.4 “Smoke Alarms Near Bathrooms”	New Provision	Smoke alarms are to be located a minimum of three feet from the bathroom door when the bathroom contains a bathtub or shower.
CFC 907.2.11.7 “Smoke Detection System”	New Provision	Clarifies that an acceptable alternative to providing single and multiple-station smoke alarms per UL 217 is to use smoke detectors, listed per UL 268, that are part of the building’s fire alarm system.
CFC 907.6.3 “Initiating device identification”	New Provision	The fire alarm system shall identify the specific initiating: device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate. 4 exceptions.
CFC 909.12.1 “Mechanical smoke control systems <u>Verification</u> ” Exception	New Provision	Where verification of individual components tested through the preprogrammed weekly testing sequence will interfere with, and produce unwanted effects to, normal building operation, such individual components are permitted to be bypassed...(SFM) limit or proximity switches installed at the damper or incorporated into the damper actuator.
CFC 909.12.2 “Mechanical smoke control systems <u>Wiring</u> ”	New Provision	All wiring, regardless of voltage, shall be fully enclosed within continuous raceways.
CFC 910 “Smoke and Heat Removal”	Revisions	Section 910 has been updated to correspond to the latest technical information developed in the United States over the last 20 years.
CFC 913.2.2 “Circuits Supplying Fire Pumps”	New Provision	New section requires that the power supply cables shall be listed and installed in accordance with UL 2196.
CFC 914.3.2 “Sprinkler Secondary Water Supply”	Revisions	Sprinkler systems in high-rise buildings in Seismic Design Category C, D, E or F are required to have a secondary water supply. The secondary water supply shall have a useable capacity of not less than the hydraulically calculated sprinkler demand plus 100 GPM... In no case shall the secondary on-site water supply be less than 15,000 gallons.

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CFC 915 “Carbon Monoxide (CO) Detection”	Relocated to its Own Section in Chapter 9, Reformatted and Revised	The CO alarm requirements that were new in the 2012 IBC and located in Section 908.7 have been relocated and extensively revised and clarified in the 2015 IBC. A CO alarm is to be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in R-2 occupancies that have fuel-burning appliances/fireplaces and/or attached private garages. Buildings with open parking garages complying with Section 406.5 or enclosed parking garages complying with Section 406.6 are not considered private garages.
CFC 1103.3.2 “Elevator Emergency Operation”	New Provision	New exception to requirements for updating elevators to latest standard which include installation of protective doors, sprinkler protection, and for freight elevators sprinkler protection provided at least one elevator complies with A 17.3.
CFC 1103.4 “Vertical Openings”	New Provisions	Significant new provisions, particularly for I-2 & 3 occupancies.
CFC 1103.4 “Sprinkler systems”	New Provisions	1103.5.1 Group A-2. An automatic sprinkler system shall be installed in accordance with Section 903.3.1. I throughout existing buildings or portions thereof used as Group A-2 occupancies with an occupant load of 300 or more.
CFC 1103.7.6 Exception 4 “Manual Fire Alarm System in Existing Group R-2 Occupancies”	New Exception	Exception 4 eliminates the requirement for a manual fire alarm system in an existing R-2 occupancy where all four requirements are met: 1. Building is ≤ three stories in height above grade plane. 2. Dwelling units are not served by interior corridors. 3. Dwelling units are separated from each other by 3/4 hour fire barriers. 4. Dwelling units are provided with smoke alarms per Section 907.2.11.
CFC 1104.22(4) “Means of Egress for Existing Buildings—Exterior Stairway Protection”	Deletion of 2012 IFC Section 1104.21(4.1)	Remainder of Section 1104.21 was moved to 1104.22. The requirement to retroactively sprinkler existing, open-ended corridor (i.e., open breezeway) buildings was deleted.
CBC Major Changes for I-1 Occupancies	<AS>; <FA>; Smoke Control; Rated Construction	There have been a number of requests for conversions of existing R-2 projects into assisted living facilities as the baby boomers are now in their 60s.
CFC 1105 “Construction Requirements For Existing Group I-2”	New Provisions	If you have an I-2, you need to read this all new section.

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CFC Chapter 50 “HAZARDOUS MATERIALS-GENERAL PROVISIONS”	Revisions - Correlation	Provisions Related to Storage, Handling And Use of Regulated Materials. Addition of language modified to reflect language adopted by Santa Clara County Fire Prevention Officers.
SJMC – CFC Appendix BB “Fire Flow Requirements for Buildings”	No Change	The State adopted the New Appendix B, but San Jose adopts the Existing Appendix BB.
SJMC – CFC Appendix C “Fire Hydrant Locations and Distribution”	No Change	San Jose deletes new footnotes “f” and “g” permit fire hydrant spacing increases based on the type of sprinkler system installed in the building.
SJMC – CFC Appendix D “Fire Apparatus Access Roads”	Revision	Modified to Exclude Aerial Access when building is High Rise.
SJMC – CFC Appendix L “Firefighter Air Replenishment Systems (FARS)”	No Change	San Jose makes Appendix L mandatory as modified. Buildings required by the local adopting ordinance to have FARS would be required to comply with Appendix L’s design, installation, testing and maintenance requirements.
CEBC 904.2 Fire Alarm System - Alteration Level 3	New Provision	Install fire alarm and detection system with any Level 3 alteration (This applies when the work area exceeds 50 percent of the aggregate area of the building).
Assembly Bill 1069	New Provision	The California Residential Code requires any new dwelling to be protected by sprinklers without regard to size. Assembly Bill 1069 allows Efficiency Units to be built without sprinklers. In accordance with AB1069, SJFD accepts detached units less than 500 sf to be constructed without sprinklers. This is in keeping with our ordinance for attached construction.